No. 14

An
Inaugural Dissertation
On
Amenorrhoea

Respectfully Submitted
To

The Medical Faculty
Of
The University of Pennsylvania
By

Tho. E. Powe Admitted March 3d - 1823.
Of
South Carolina.

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Amenorrhoea.

Amenorrhoea is derived from the Greek words a priv: μην a month and ρεω to flow: It consists in a suppression or partial obstruction of the menstrual evacuation from other causes than disease, pregnancy and old age. Cullen has placed this disease in the class Locales, & order epischeses, and divides it into emansio mensium, suppressio mensium and difficilis menstruatio, the situation of this last however is not strictly correct, though it may be considered as a variety of the suppressio, as the discharge is temporarily suppressed. It is my object to treat only of the two first.

The emansio mensium is when the discharge does not occur at the time when it should take place. The period however for the flow of the menses is so much influenced by climate, the mode of living, the peculiarities of the constitution, and structure of the body, that to

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attempt to lay down any data for their appear-
-ance is at once futile and impracticable.
Thus in northern legions, the period is retar=
=ded to the eighteenth or twentieth year. In
the temperate zone thirteen to fifteen is the
usual time, while farther south it is not
unusual or uncommon to see girls of the
age of ten or eleven years old with their off=
=springs in their arms. It is not therefore from
the age of a person Retention is to be considered
a disease; but it is, when about the custom=
=ary time of the flow of the menses, many
unpleasant disorders arise which from their na
=ture we are induced to attribute them to a
retention.— These are ushered in by a general
languor and sluggishness of the body, appetite
often bad or fanciful, having an extraordinary
desire for the eating of hard and undigestible
substances as chalk, lime-plastering, clay sand,
charcoal &c. at the same time a disgust or loath=

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=ing of the common and proper articles of di=
=et. The bowels for the most part are constipated
accompanied with bad breath acid & fetid
eructation with many other signs of dyspepsia.
These symptoms continue for a while when
the losy complexion subsides and we have in
its stead, a pale, yellow, and often a greenish
color of the skin, together with a vomiting
of a grenish matter from which the disease
takes its name. The lips and gums exchange
their vermilion hue for a greenish paleness.
The eye is dull and heavy, the lower part
of the orbit is a little swollen and of a dark
=ish color: The pulse generally is small and
slow but by the slighest exercise it becomes
quick and irregular. Palpitations of the heart,
also laboring and hurried respiration are indu
=ced by bodily exertion and mental emotion.
Syncope sometimes occur, also convulsions: headache
dulness, vertigo, impaired memmory afterwards

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ensue, amounting in some instances to confirm=ed mania and idiotism. The mind is in an irritable and melancholy state, which causes the unhappy sufferer to avoid compa==ny and seek solitude. — If the disease is not arrested here it runs on into Phthisis Pulmo=nalis: or the flesh becomes soft and flaccid, the perspiration checked, oedematous swellings of the extremities are succeeded by anasarca, and death finally closes the melancholy scene. however in the worst stages of this complaint, when death appears to be fast depending and almost inevitable: a small discharge of mucous or serous matter, somewhat colored with blood makes its appearance and gradually gives signs of returning health. It comes on at first at distant and irregular periods, it by degrees assumes a more natural appearance, and a more regular time of recurring, until final==ly the strength of the system being restored

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and by the influence of habit, its perfect nature and character are fully established: when we will soon behold her, who had been a cheerless, pale, sallow, chlorotic girl, in possession of a cheerful & happy disposition, a blooming complexion with all the other appearances of perfect health. But indeed so very rare does the disease take such a favorable tendency; that we not unfrequently see cases which resist the virtues of the best remedies, and baffle the skill of the most learned Physician.

Dissections of those that have died of Retention of the menses, shew the ovaria to be in a dropsical or schirrus state. The Uterus, Liver spleen, pancreas and mesenteric glands have also been found in a diseased condition.

Causes. The disease we are now treating of may depend on a malformation of the genital organs; a deficiency or deranged state of the ovaria; an imperfect developement of the Uterus

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an imperforated hymen: But by far the most frequent cause is debility of the system in general and Uterus in particular. what sometimes though very rare, gives origin to this disease is plethora or too much fulness.

Treatment. In conducting the cure of this complaint, I shall make allusion only to such cases as it is in the power of the Practitioner to relieve. when the menses are retained in=consequence of an imperforated hymen, it will be made sufficiently obvious, by the girl about the usual time of menstruation possessing good spirits and health, and shewing she had arrived to the years of maturity by the enlargement of her Mamma; the perceptible change which takes place in her voice and manner: and when about the accus=tomed periods of menstruating she has all the symptoms indicating such an action going on and no discharge appearing, while

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at the same time the abdomen continues to enlarge, when such symptoms as these present under such circumstances we should not hesitate to make an examination per vaginam, should the hymen be found to be imperforated immediate relief will be afforded by perforating it with a trocar or some other sharp pointed instrument.

In cases where this disease proceeds from debility, the indications of cure are perfectly clear and inteligible, the object we should have in view is, in the first place to restore the system to its former strength and vigor: and secondly to administer some stimulant that would have a direct action on the uterine vessels. For the purpose of fulfilling the first indication such a course should be pursued, that is best calculated to give support & tone to the system.

We must direct for our patient a generous nutritive diet, with a liberal use of wine, particularly avoiding those articles which disagree with

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her, also those that are liable to fermentation, moderate exercise, either walking, riding in a carriage, or on horse-back, the last is preferable; care must be taken however that it should not be carried to such an extent as to induce fatigue. The warm-bath impregnated with common salt succeeded by frictions with dry flannel or a flesh-brush, should be used.
Clothing is an article of considerable consequence in the cure of this complaint; the patient should always be kept warm and comfortable, sometimes it is even necessary she should wear flannel next the skin; and above all particular attention should be taken to keep her feet perfectly warm and dry as by neglecting this simple precaution the cure may be wonderfully retarded if effected at all. The patient should enjoy the benefit of pleasant and agreeable company, and nothing I conceive would have a better tendency than permitting her to attend parties, as the com-

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=bination of exercise, music, and agreeable society, would give vigor to her frame, and bring into association all those warm and pleasant feelings of the mind which exercise such a powerful influence over the body, therefore, the different watering places in the summer should be visited, all something also may be anticipated from the Tonic property of the waters.

The different calybeate preparations must be used the best of these is the carbonate of Iron in doses from 10 to 15 grs. two to three times a day; this form however most generally disagrees with the stomach and to avoid that inconvenience we should prescribe a neat and an agreable prescription made as follows,

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Cort. Aurant. ℥ss.
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two or three days in a warm situation; it then should be decanted when it is prepared for use; half a wine glass-ful should be given several times a day.

The teas, of Chammomile flowers, of the hops & quassia are highly efficacious tonics, and well suited to this case.

Cold-Bathing in the disease before us should be used with considerable caution and discrimination, when the system possesses sufficient susceptibility to produce reaction it most assuredly is beneficial, should this however not occur it will be decidedly injurious.

When at the commencement of this disease there is sickness at the stomache, nausea or vomiting, we should prescribe an Emetic of fifteen or twenty grs. of Ipeca. to free and cleanse the stomache from acid and inactive fluids. During the whole course of the disease the bowels must be carefully and

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regularly attended to, they are generally in a torpid and inactive state, which by a sympathetic action is communicated to the whole system; to obviate this condition of things the Aloetic or Hoopers pill given once or twice a day as the occasion may demand is well adapted.

We now arrive to the second object of cure which is to ~~stimulate~~ use such means as are best calculated to stimulate the vessels of the Uterus: here again the different kinds of exercise may be mentioned as possessing such a power; also as having the same tendency are frictions of the lumbar region, and inside of the thighs; Leeches applied to the vulva have been much recommended as acting on the principle of revulsion. Electricity passed through the Uterine region at the time when tourniquets are applied around the thighs stimulate in a considerable degree that organ.

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What may be considered as very useful, & should always be resorted to in cases of this kind, is the bathing of the feet and legs in warm water just before going to bed; or sit=ting over the fumes of warm water.

As the impediments to the common process of nature in retention are almost entirely if not invariably dependant on constitutional causes, so consequently it is only necessary in most of instances to use such means for removing them as operate on the general system; but however, in those cases where this mode of treatment will not prove successful we are to resort to that class of medicines called emmenagogues, and these, from their direct and stimulant action on the Uterus, should be employed with a sound and discriminating judgment, to prevent them from being injurious: the regulations that should govern their administration will be mentioned under the head suppressio, as being now used

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in, and applicable to, that form of the disease. It has been mentioned that in some cases of chlorosis many symptoms appear which bear a very striking resemblance to Phthisis Pulmonalis, though by paying particular attention to them it may be seen it is not connected with diseased Lungs, but it has a tendency that way and should it be suffered to run on for any length of time, it certainly would become confirmed consumption; it may be distinguished from Phth. Pulmon. by the following signs. The pulse although frequent is not subject to regular exacerbations; a full inspiration gives no pain, and but little disposition to cough; the cough is not encreased by motion or on going to bed; but it is worse in the morning, attended with an expectoration of Phlegm, It is not short like that excited by Tubercles but comes in fits, and sometimes convulsive, at the same time palpitations with many

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other hysterical symptoms accompany this affec=
=tion; the digestive powers are almost always
deranged. In this disease a gentle-emetic must
occasionally be given, and the bowels are to
be kept in a soluble state; as an emetic the
sulphas Cupri has by some been prefered, though
I do not know for what reason, indeed its oper=
=ation is so quick and its effects so confined and
limited, it appears to me that one of a more
pervading nature would have a better ten=
=dency, as Ipecacuanha either alone or combined
with Tartar-Emetic. Mr. Burns strongly recom=
=mends Myrrh combined with the oxide of
Zinc as being well adapted to this complaint;
also ammonia given in the form of an emulsion
with oil for relieving the cough; if the patient
be in the City she should remove to the country
and take moderate exercise. Her diet should
be light but nourishing; Milk generally agrees
with such patients very well, but the light &

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digestible kinds of meat should not be prohibited. If the disease should resist the power of this treatment, and continue to become worse; she should be directed to go to some warm climate: as being the most certain and speedy means of relief. Emenagogues appear to be of no advantage in this disease.

When retention of the Menses is dependant on a plethoric state of the system no one can hesitate to reduce the system down to the healthy standard by the judicious employment of venesection, cooling cathartics, abstemious diet &c.

Suppressio Mensium, may be divided into checked, and obstructed. It is called checked when it is stopped from some cause during its flow. and Obstructed when from the operation of some agent during the interval its recurrence is prevented. The causes most liable to produce check=

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-ed menstruation and violent passions of the mind, application of cold to the body, and excessive ~~xxxxxx~~ exercise: which not only occa=-sions the flow to be discontinued, but produces considerable pains in the Uterine region, spasmodic contractions of the Stomach and Intestines, hysterical symptoms and not unfre=-quently considerable fever. The derangement is not always only temporary, the former strength and vigor of the Uterus may not be restored for a considerable time after these symptoms subside. The most speedy and effectual means of releiving these distress=-ing affections are, by the employment of the Semicupium, afterwards placing the patient in bed, and give her large doses of Laudanum with some Ipecacuanha or the Saline julap, and warm diluents: what also is very good is a combination of Camphor with Opium liberally given. If the Stomach be so irritable

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as to reject whatever is swallowed, an injection composed of Laudanum with camphor or asafoetida should be thrown up the rectum. The abdomen must be well fomented and rubbed. Should this disease be accompanied with fever or a full plethoric habit, the lancet must not be withheld. Provided these means be not sufficient to restore the discharge at the regular period, we must proceed as directed hereafter.

I mentioned above that the menses may be prevented from recurring at the regular period by the interference of some cause during the interval which is called obstructed menstruation. It is well known and universally admitted, when the menses have been once established in their course they cannot be suppressed with impunity by any other cause than conception. Too with this single exception, as soon as they deviate from

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their monthly appearance we have sufficient evidence to believe there exists some barrier to the common process of nature, which if suffered to remain for any time will become a source of considerable inconvenience, if not even dan=
=ger. This disease has by some authors been divided into Idiopathic and symptomatic, which ap=
=pears to me to be perfectly correct and proper, for if we attribute primary diseases to the Stomache, Liver & other organs, why should we not to the Uterus, for it is a viscus that perform important and independant functions, it poss=
=esses a vast degree of sensibility, and in every respect appears to be equally liable to the attacks of Idiopathic diseases as the other viscera, & may unquestionably when much affected, strongly influence the constitution.

The Causes producing this disease are Cold, fear, anxiety of mind, confinement, frequent abortions, excessive venery &c. Obstruction however

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is sometimes symptomatic of other diseases, and particularly of general debility of the system.
When the menstrual flux remain obstructed for any time it not unfrequently happens that the blood which should have been determined to the Uterus, takes a direction to some of the other parts of the body, from which it obtains a periodical flow; for instance from the eyes, nose, ears, mammæ, lungs, hemorrhoidal vessels &c.
A very remarkable case of a vicarious discharge was communicated in the 17th No of the Medical recorded by R. La Roche M.D. of Philadelphia, where the female had a sandy discharge from the neck, feet, and hands, at the period of menstruating. Another case related by the same Gentleman in the same No where his patient had a monthly evacuation from the saphena vein. These discharges are always preceded by symptoms similar to those indicating a flow of the menses.

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In forming our opinion of the Prognosis in this disease, we are to be governed, by the causes which have given rise to it the length of time it has continued, and the state of the persons health in other respects. when suddenly obstructed inconsequence of cold, excessive passion &c. it may be easily restored by pursuing a proper course. but in cases where it has been of long standing and Leucorrhea attends we are to consider them as unfavorable.

Dissections of those that have died of this disease, shew the ovaria and Uterus to be diseased in a similar manner, as in retention.

The immediate and remote effects of obstruction are very much modified by the previous state of the system, particularly with regard to a weak debilitated, and a plethoric habit. Also by the condition of the individual organs which already disposed to disease, may thus be excited more readily to a morbid action.

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Treatment. In our endeavor to cure this disease we must recollect that it may be connected with two very different states of the system. In those cases where it occurs in a debilitated condition of the system we must proceed much in the same way as recommended under the head Retention. The patient should take exercise on horse-back proportioned to her strength. It would be advisable for her if possible to reside in the country. All the Tonics that were mentioned ~~under~~ the Treatment of Retention as the preparations of Iron and copper; vegetable bitters &c. are proper here. If there is not a too decided chlorotic disposition the cold-bath must be employed, but should this produce head-ache, chillness and languor, it should be discontinued and the tepid bath substituted. as cooperating with these means we should have recourse to the various Emenagogues; and none appears to be

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entitled to as high a standing as the Polygala Senega, this article was first recommended by Doct. Hartshorn of this City, as possessing very valuable properties in the cure of this disease, which has also been corroborated by the ample experience of Doct. Chapman. I have myself seen this medicine succeed in restoring the discharge in two women who had for a considerable time resisted the powers of various articles of this class, in both cases it was given at first in the proportion of ℥iij or ℥iv of the decoction in the twenty-four hours, and when the menstrual effort was expected, it was administered in as large doses as the stomach could bear. In neither case was it necessary to continue the medicine longer than three weeks as the menstrual evacuation was restored and the patients recovered entirely. Should the simple decoction disagree with

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the patient some aromatics, as orange peel, cinnamon, ginger &c. should be added. During the interval it is advised to discontinue it for a week or two, as it becomes nauseous and offensive to the stomache, if not inefficacious. Dr. Chapman thinks it is well adapted to those cases where the deciduous membrane is formed; when this state or condition of the Uterus exists the menstrual discharge is invariably suspended, the reason is obvious enough for the two actions are totally incompatible with each other, as there is no doubt the vessels which secrete the menses are now concerned in the production of this new body.

Tinct. Gum Guiac. bi. is highly recommended by Dr. Dewees in the complaint before us; he observes that from an experience of thirty years, he has in no single instance had this Tinct. to fail him, when the disease was not connected

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with some visceral obstruction or constitution=
=al derangement: and if we reflect on the exten=
=sive experience and the undoubted veracity of
this learned Physician we cannot for a moment
hesitate, to employ it in all cases when it is
admissible with promptness and perseverance.
The Tinct. he employs is different from the for=
=mula in the shops, in having ℥viij of the Gum
Guiac. instead of iv. he advises a teaspoonful of
Tinct. to be given three times a day gradually in=
=creasing the quantity. The Doct. again observes
it is admirably suited, to the detachment of, & c
changing the action that, produces the decid=
=uous membrane.
The Juniperus Sabina from its well known stim=
=ulant effects on the Uterus appears to promise to
be, in cases of extreme debility and torpor, an use=
=ful and an important emenagogue. It was first
brought into public notice by Dr. Home of Edin=
=burg about half a century ago, who bore strong

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testimony in its favor. The high authority of Cullen however, who was very sceptical with regard to the virtues of all emenagogues threw it back once more into partial disuse; it is at present only occasionally resorted to, it is given in doses of fifteen or twenty grs. of the powdered leaves three or four times a day.

Helleborus Niger, is an article that possesses no ordinary powers as an emenagogue; it was first recommended by Dr. Mead, who considered it as highly useful in obstructed Menses. Doct Physick also concurs in that belief and observes he scarcely ever saw a difficult case cured without its use. It most commonly is given in the form of Tinct. Melampodii, in the quantity of thirty or forty drops, several times a day.

To the number of Emenagogues already enumerated, we might enter into a full detail of the virtues of Rubia Tinctorum, Cantharides, Phosphorus Terebinthinate preparations &c. But it appears

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to me that it would only be an unnecessary trespass on your time and patience.

About the period the menstrual effort is expected to be made, we should be vi=
=gilant in our attention and prompt in the administration of proper remedies; as by such a course much good may be done, by giv=
=ing at this time an emetic, that will produce an active and vigorous impression on the stom=
=ach; by an associated action that condition of the Uterus will be apt to be restored, which is necessary for it to perform its secretory func=
=tion: this should be accompanied with se=
=micupium, together with at night a pill of opium. Blisters have also been recommended to be applied, to the region of the Uterus, or on the lumbar region, and to the inside of the thighs.

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the face flushed, the eyes red and inflamed, the skin dry and warm, pains in the head & lumbar region, a sensation of weight and full=ness in different parts of the body:— the Lan=cet should be used, and indeed the anti=phlogistic plan should be strictly adhered to as frequent purging, low diet &c. when by this treatment the system is reduced to the natural standard, and the menses still con=tinue obstructed, we should cautiously inter=pose some of the mild emenagogues, with an occasional purge consisting of Aloes and Rhu=barb or Calomel.

Thus Gentlemen, I have to the extent of my abilities performed the last requisite imposed on every candidate of this institution for a degree. In no part do I as=sume to myself anything as original, but have merely given those ideas which I have collected from yourselves & my reading.

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Should I be so fortunate as to meet your approbation the height of my ambition will be obtained; In closing this dissertation I cannot refrain from expressing to you, my deep sense of gratitude for the many use=ful and important lessons you have taught me; That you may long continue to adorn, those high and responsible offices you now occupy is

the ardent wish

of

Tho. E. Powe.